## SIR WILLIAM CROOKES

Famous English Chemist and Physicist, Dies at Age of 86.

London, April 5.—Sir William Crookes, the famous chemist and physi-

cist. died here yesterday.

Sir William Crookes was born in London on June 17, 1832. He received his education at the Royal College of Chemistry, becoming an assistant professor there in 1851. In 1861 he discovered thalium, a new element, while conducting an examination of the residue left in the manufacture of sulphuric acid, and while carrying out investigations of the metal and its properties, found that it appeared heavier when cold than hot. This was explained by him as being due to a "repulsion by radiation."

Utilizing the principle he had thus discovered, he constructed the radiometer which in turn led him to his famous researches on the phenomena produced by the discharge of electricity through tubes from which the air had been exhausted. To the development of this work the scientific world owes its present "electronic" theory, involving

"radiant matter."

Later he began an inquiry into the constitutions of rare earths, his researches leading him to results which proved startling to scientists. On the discovery of radium, he took up the study of the element, doing much to bring its forces to the service of mankind.

He wrote and edited various works on chemistry and chemical technology and in his later years gave considerable attention to psychic phenomena, which he endeavored to correlate with psychal

laws.

He was knighted in 1904 and was the recipient of many honors from scientific societies in Europe. He was married in 1856 to Ellen, daughter of W. Humphrey, of Darlington. She died in 1916. He is survived by four sons and one daughter.